



INTRODUCTION

Injuries in the United States constitute a major public health problem. The enormous toll of disabilities, mortality, productivity and health care dollars due to injuries are well documented (NRC, 1985; Rice, et al., 1989; Fingerhut, et al., 1997). In FY 1995, injury related mortality and morbidity cost the nation approximately \$260 billion (Institute of Medicine, 1999). Although cardiovascular disease and cancer kill more people, injury is the leading cause of the years of potential life lost (YPLL). (YPLL is a more accurate measure of premature mortality by weighting deaths occurring at younger ages more heavily than those occurring in older populations.). According to the Institute of Medicine, the effect of prevention or treatment efforts on death rates should be measured in terms of potential years of life lost or preserved, and not in terms of listing the numbers or types of death or numbers of life saved (IOM, 1999).

Injuries cause significant mortality and morbidity in the Lancaster County population. Injuries were the leading cause of death in the 1-44 year age group in Lancaster County during the 1990's. Injuries that send people to the hospitals are particularly costly in terms of human suffering, health care cost and time lost from work. Between 1992 and 1999, over 200,000 injury episodes were reported, and 883 people died due to injuries. Approximately 147,000 emergency department visits and 54,000 hospital discharges were associated with injuries during the years of record.

This report provides information on patterns of injury morbidity and mortality in Lancaster County. The findings of this report stem from the injury data on hospital care (1992-1999), and death data (1992-1998). The hospital care data were collected from the three area hospitals (emergency room visits, inpatient, outpatient), whereas the mortality data came from the state death registry. Due to the lack of a universal system for reporting non-fatal injuries, our surveillance system relies on hospital discharge data. The injury data for these years represent consistent and comparable sets of data useful for analyzing trends through the 1990s. These data were analyzed to examine injury deaths and events by age, sex, intent and cause. Days of hospital stay is included to provide information on severity of injury. Further, this report explores the relative frequency of different types of injury compared with other types of injury, trends over time (increase, decrease, or no-change in mortality and morbidity), new injury problems (for example, introduction of a new product may cause concerns), and community intervention efforts. Once we know the type of injuries associated with hospitalization, and the population at risk, this knowledge will enable us to more effectively target our efforts to prevent injuries. LLCHD's injury surveillance is an ongoing process of tracking and monitoring incidence, causes, and circumstances resulting in fatal and non-fatal injuries, and dissemination of the data for injury prevention. This is a population-based (geopolitical population of Lancaster County) surveillance approach. The statistical results of this report are useful for assessing the need for, and monitoring the effectiveness of, our injury prevention programs.

The following are some of the important findings from our surveillance:

- Although injuries accounted for a small proportion of deaths, years of potential life lost (YPLL) due to injuries surpassed all other leading causes of death in Lancaster County
- There was an increase in number and rate of injuries since 1992
- More men than women died due to injuries, but more women than men sustained injuries
- 201,264 individuals sustained injuries, of which 884* died from injuries (1992-1999).
- Injuries were the leading cause of death among 1-44 year age group between 1992-1998.
- Motor Vehicle Traffic injuries have steadily increased from 2,152 in 1992 to 3,137 in 1999—a 31.4 percent increase.

*Number is based on E-Coded hospital records.

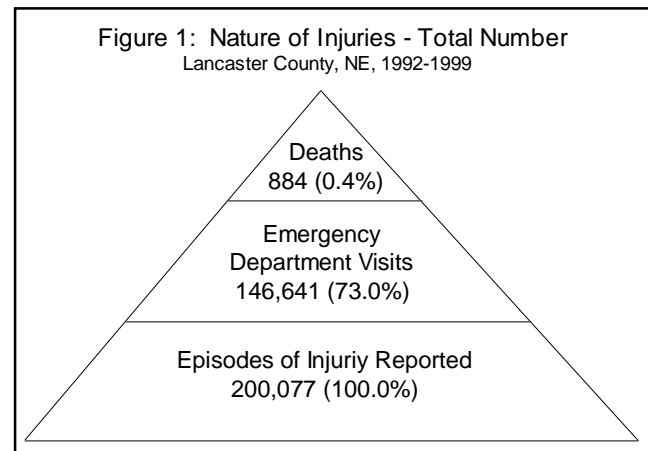
- Approximately 60 percent of injury mortality and 95 percent of injury events were unintentional.
- Suicide accounted for 30 percent of injury deaths.

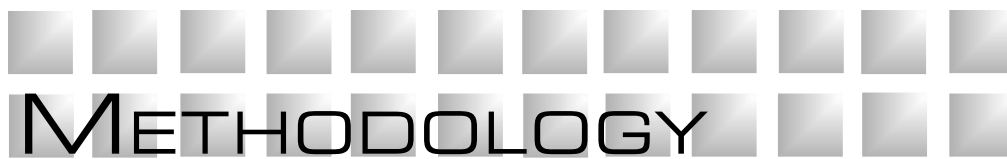
The findings of this report will guide the injury prevention efforts of the Lincoln-Lancaster Health Department (LLCHD), policy makers, academicians, parents and other caretakers. Prevention and control of such injuries continues to be important public health concerns.

Magnitude of the Problem due to Injuries in Lancaster County

With its enormous toll on premature death, disability, health care dollars, and weakening the productive capacity of our work force, injury is a major public health problem in Lancaster County. Figure 1 shows the overall burden of injuries on Lancaster County between 1992 and 1999. Although only a small proportion of injuries resulted in death (884 between 1992-1999) episodes of injuries reported were enormous (N=200,777).

Approximately 73 percent of cases were seen in the emergency rooms of three local hospitals between 1992 and 1999. Emergency room visit records show the severity of injuries. On average, approximately one in nine Lancaster County resident annually suffers an injury requiring medical care. There is considerable variation in injury morbidity and mortality rates among Lancaster County residents, depending on their age and gender (see Appendices). Although we do not know the precise human and dollar costs of these injuries, it is safe to say that they are enormous for our county. The burden of injuries falls on individuals, their families, and taxpayers. While all segments of population are vulnerable to injury deaths, it particularly affects younger people, and is persistently the leading cause of death and disability among our residents aged 1-44 years. Injuries are responsible for more years of potential life lost (YPLL) than any other health event in Lancaster County. YPLL is a mortality index, which provides a more accurate measure of premature mortality by weighting deaths occurring at younger ages more heavily than those occurring in older populations. Although the rates, such as crude and age-adjusted, are important measures of county's health status, they often fail to tell the entire story of temporal changes in premature mortality.





METHODOLOGY

This report uses two types of data: 1) hospital injury data, and 2) mortality data. The former were obtained from the three area hospitals whereas the latter came from the death registry of the State of Nebraska. Both hospital discharge data and death certificate data are indispensable for monitoring outcomes, assessing performance of the surveillance system, determining the etiology and scope of injury problem in Lancaster County, and influencing public policy. The hospital care injury data and mortality data used in this report are part of Lincoln-Lancaster County Health Department's (LLCHD) injury surveillance system, which was created in 1989 with the cooperation from three area hospitals: St. Elizabeth, Bryan LGH, and Lincoln General Hospital. In 1998, Lincoln General Hospital became Bryan LGH West. The LLCHD obtains all injury-related emergency room (ER), outpatient (OP) and inpatient (IP) medical records from these three hospitals every year.

The injury records obtained from the above mentioned hospitals are standardized according to the International Classification of Disease (ICD) system's external cause of injury codes (E-Codes). The ICD classification system is revised every ten years. Although ICD is now in its tenth revision, our surveillance system uses the clinical modification (CM) of the ninth revision of ICD. The CM was developed by the National Center for Health Statistics (NCHS), which is the most commonly used classification system for morbidity in the United States.

The E-coded injury classification is very useful because: 1) it defines injury as a public health problem; and 2) identifies and characterizes cause and risk factors of injury, and thereby facilitating problem analysis and development of effective prevention activities. The E-coded data were obtained from the emergency room, inpatient and outpatient logs of the three hospitals, and only Lancaster County residents were included in the final data analyses.

The mortality data were obtained from the death registry of the State of Nebraska. The LLCHD keeps death records of its residents as part of its vital statistics data. The Lancaster County death data reveals information such as age, gender, race, Hispanic origin, marital status, educational attainment, and cause of death. All death cases where injury was a contributing factor were included in this report. Unfortunately, death certificates do not tell us when an injury is an underlying cause of death.

Our report follows the framework for presenting injury data recommended by the Centers for Disease Control and Prevention (CDC) (MMWR, 1997;46:RR14). The CDC guidelines, which are based on ICD 9- CM 9, are useful for general categorization of injuries by mechanism and intent. They are presented in a matrix format. The CDC guidelines are recommended because of the: a) consistency with ICD-9 coding conventions, b) extent to which data were needed for surveillance and prevention activities at national, state and local levels, c) assurance that E-codes assigned to groupings were mutually exclusive, and d) frequency of injury morbidity assigned within specific mechanism-by-intent-of-injury categories. In this report, the mechanism, or cause of injury, is often combined with the intent of injury. The cause of injury has 20 categories (Appendix I).

Some of these categories are divided into sub-categories. For example, motor vehicle traffic is such a category, which is further divided into several sub-categories, such as occupant, motorcyclist, pedal cyclist, and pedestrian. Intent or manner has two broad classifications—unintentional (often called “accidental” in the past) and intentional. Intentional is further categorized into self-inflicted and assault. When intention of injury is not determined, injuries are recorded as “undetermined.”

This report uses population data from the U.S. Bureau of Census to calculate death rates from 1992 through 1998 and injury event rates for 1992 through 1999. The U. S. Census Bureau official population estimates were used for all these years.

Rates and frequencies are reported throughout this document. Rates may give a clearer picture of the risk of injury in a demographic category, such as children between 14-18 years. Frequencies present the actual numbers of Lancaster County residents affected by an injury. Sometimes, numbers were so small that rates were not calculated. For example, homicide numbers were so small that a table showing leading causes of homicide by gender and age could not be created. This report contains both, and the reader is cautioned to note the difference. Age-adjusted rates are calculated in order to examine the trends of injury morbidity and mortality. Age-adjusted rates are generally used to compare the rates by accounting for the difference in age of the population.

Data Uses and Limitations

More and more injury prevention programs in the United States now rely on morbidity and mortality data collected by external cause of injury codes or E-codes for program planning and evaluation. E-coded data are useful to LLCHD for prevention activities. Although the ICD 9-CM 9, E-coded injury data are extremely relevant, they fail to identify the nature of injuries, such as occupational, residential or recreational injuries, or circumstances surrounding the injuries. E-code is a secondary diagnosis code for the external cause of an injury. If an injury case has a principal diagnosis in a range of ICD-9: 800-999, then E-code (E800-E999) as a secondary diagnosis is desired. The Uniform Billing 1992 (UB92) in the State of Nebraska requires hospitals to report E-code with discharge records.

Two important variables race and socioeconomic status of the patients are missing from the E-code injury data. Race and socioeconomic information are very important from a public health perspective.

Despite their limitations, the E-coded data are well suited for examining the epidemiology of injury-related mortality and morbidity (hospitalizations). They provide us with the critical information about the mechanism and intent of injury, its treatment, status of patient on admission (emergency room, and in- or out-patient) status of patient on discharge, age of patient, and medical diagnoses. This information is crucial for setting program priorities for prevention, and evaluating the impact of our policies and expenditures.

Although we have complete injury data (both mortality and hospital care) from the three area hospitals, we do not have information associated with unreported injury cases. This includes: 1) injuries not severe enough to go to the hospital, 2) injuries treated at home or at a doctor's office, 3) patients may not have sought medical care due to the lack of medical insurance, and 4) Lancaster County residents who were injured outside of the county or sought treatment elsewhere.

Our data showed some problems associated with the E-code itself. Although CDC's guidelines specify that E-code 849 (place of occurrence) must not be assigned as the cause of injury, we found over 6,000 cases that were assigned this E-code. In order to obtain cause of injury, we replaced 849 with corresponding diagnosis of one of the other accompanying diagnosis code that did designate cause of injury.

The hospital based injury data does include duplications of injured cases. It is hard to tell as to how many cases were duplicated. It is quite likely that some patients transferred from one hospital to another, and patients admitted multiple times for the same injury may have been counted more than once. St. Elizabeth and BryanLGH's information managers estimated that the number of cases repeated were not significant.

INJURY DEATH

Epidemiology of Injury Deaths in Lancaster County

The following sections will describe the extent of injury deaths in Lancaster County between 1992 and 1998. We will start with the discussion of YPLL due to injuries and other diseases. Mortality of injury will be described first followed by the events of injuries. This report will examine the intent of injuries with respect to age and gender. Numbers, proportions and rates will be given where appropriate.

Deaths

In Lancaster County, injuries account for more premature deaths before 65 years of age than heart, cancer, or cerebrovascular diseases, the three leading causes of death. Figure 2 shows the mortality caused by injuries and other diseases, and years of potential life lost (YPLL) in Lancaster County between 1992 and 1998. Although injury with 666 deaths was the fourth leading cause of death (Heart, 3396; Cancer, 2666; and cerebrovascular disease, 772), YPLL due to injuries exceeded all other causes of deaths (Figure 2). YPLL, as narrated earlier, is an indicator of premature mortality due to injuries.

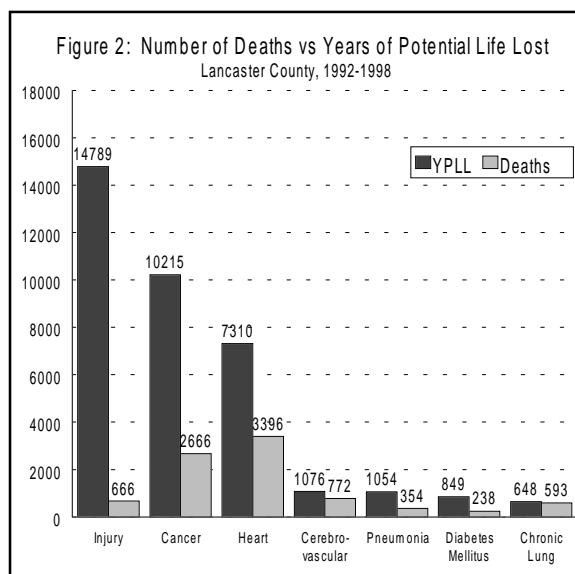


Table 1 shows five leading causes of death among different age groups in Lancaster County from 1992 to 98. Injuries were the leading killer of children and young adults between 1 year and 44 years of age. Injuries were also the third leading cause of death in people in the 45-54 year age group. Children less than 1 year old and adults between 55-64 years were also substantially affected by fatal injuries which ranked fourth as the leading cause of death among these age groups.

Table 1: Five Leading Causes of Death by Age
Lancaster County, 1992-1998 Age-Specific Rates*

		Age (In Years)											
Rank	Under 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
1	Conditions of Perinatal Origin 295.4 (68)**	Injury± 9.9 (9)	Injury± 6.2 (7)	Injury± 12.0 (12)	Injury± 30.0 (38)	Injury± 24.1 (43)	Injury± 41.4 (121)	Injury± 53.6 (131)	Malignant Neoplasm 153.9 (217)	Malignant Neoplasm 350.8 (405)	Malignant Neoplasm 791.0 (750)	Heart 1715.0 (983)	Heart 6195.0 (1344)
2	Birth Defects 195.5 (45)	NA	Malignant Neoplasm 6.2 (7)	Birth Defects 3.0 (3)	Dis Intestine & Peritoneum 1.6 (2)	Malignant Neoplasm 3.9 (7)	Heart 12.7 (37)	Malignant Neoplasm 46.7 (114)	Heart 100.7 (142)	Heart 218.3 (252)	Heart 583.2 (553)	Malignant Neoplasm 1310.2 (751)	Malignant Neoplasm 1733.1 (376)
3	SIDS 91.2 (21)	NA	Dis. of Blood and Related Organs 1.8 (2)	Malignant Neoplasm 3.0 (3)	Heart 1.6 (2)	Heart 3.4 (6)	Malignant Neoplasm 10.3 (30)	Heart 27.0 (66)	Injury± 43.3 (61)	Chronic Obstr. Pu. Dis. 39.8 (46)	Chronic Obstr. Pu. Dis. 183.5 (174)	Cerebro-vascular Disease 427.4 (245)	Cerebro-vascular Disease 1677.8 (364)
4	Injury± 52.1 (12)	NA	NA	Heart 2.0 (2)	Malignant Neoplasm 1.6 (2)	NA	NA	Cirrhosis & Chronic Liver Disease 7.4 (18)	Cerebro-vascular Disease 17.7 (25)	Injury± 31.2 (36)	Cerebro-vascular Disease 93.9 (89)	Chronic Obstr. Pu. Dis. 404.8 (232)	Pneumonia & Influenza 829.7 (180)
5	Heart 34.8 (8)	NA	NA	NA	NA	NA	NA	Diabetes Mellitus 3.7 (9)	Diabetes Mellitus 12.8 (18)	Cerebro-vascular Disease 29.4 (34)	Diabetes Mellitus 58.0 (55)	Injury± 132.6 (76)	Mental Disorders 608.4 (132)

*Age-Specific Rate Per 100,000 Population

**Rate (Number of Deaths)

*Includes Unintentional Injury, Undetermined Injury, Suicide, and Homicide

Injury Death Trends

Overall Trend

The following figures show the trends associated with injury deaths in Lancaster County between 1992 and 1998.

Figure 3 depicts overall injury death trends for the time of record. This figure demonstrates inconsistent patterns of change. Although the death rates continued to decline from 40.1 deaths per 100,000 in 1992 to 26.2 deaths per 100,000 in 1995, a sharp increase in rates was noticed in 1996 when they rose to 40.2 deaths per 100,000. The rates continued to rise between 1995 and 1998 (from 26.2/10⁵ in 1995 to 41.8/10⁵ in 1998).

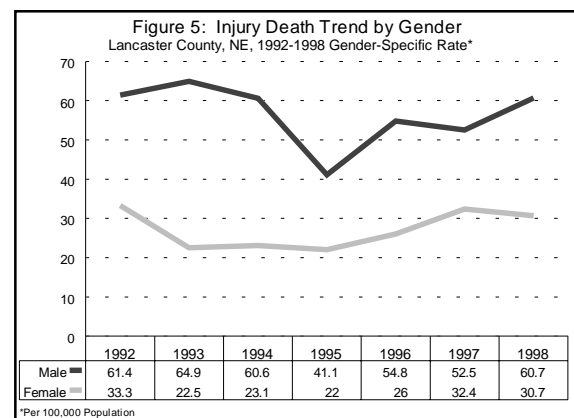
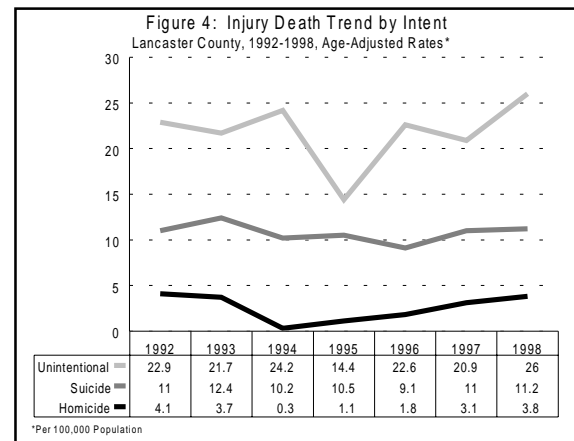
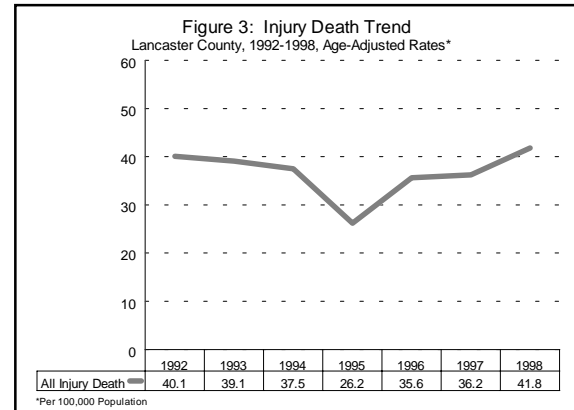
Injury Death Trend by Intent

Figure 4 shows overall trends of unintentional and intentional (homicide and suicide) injury deaths. The rates for unintentional injury deaths was much higher than those of intentional injury deaths. Unintentional death rates show significant fluctuations. These rates were at an all time low in 1995 (14.4/10⁵). However, the rates have increased significantly since then (80% increase in 1998). Suicide trends, on the other hand, show very little change over the years. These rates have remained about the same for the period of record.

Homicide rates were the lowest of all injury deaths. Although the homicide number and rates were quite insignificant compared to unintentional or suicide deaths, they have been gradually increasing since 1994. There were nine homicides compared with 29 suicides and 66 unintentional deaths between 1992-1998. The highest homicide rate (4.1/10⁵) was recorded in 1992.

Injury Death Trend by Gender

Figure 5 reveals injury trends associated with gender. In general, men were twice as likely to die due to injuries than were women. Death rates declined substantially for men from 1992 (61.4/10⁵) to 1995 (41.1/10⁵). (A sharp decrease in rates was noted in 1995 when the death rate declined to 41.1/10⁵ from 60.6/10⁵ in 1994). In 1996, however, rates went up again, followed by a slight decline in 1997. An increase in rates was witnessed for men from 52.5/10⁵ in 1997 to 60.7/10⁵ in 1998.



Death rates for women, on the other hand, showed fewer fluctuations. Women's death rates increased gradually between 1993 and 1997. The rise in rates was not significant between 1993 (22.5/10⁵) and 1996 (26). A significant increase was noted in 1997 (32.4) from 1996 (26). Finally, the mortality rate for women went down slightly in 1998 (30.7) from 1997 (32.4).

In 1993 and 1994 the mortality ratio between men and women went as high as 1:3. This significant rate difference in mortality between men and women was maintained throughout the years of record (1992-98). In 1995 death rates were lowest for both sexes. Overall, there was a decline in death rates for men, although the rates increased substantially in 1996 and 1998.

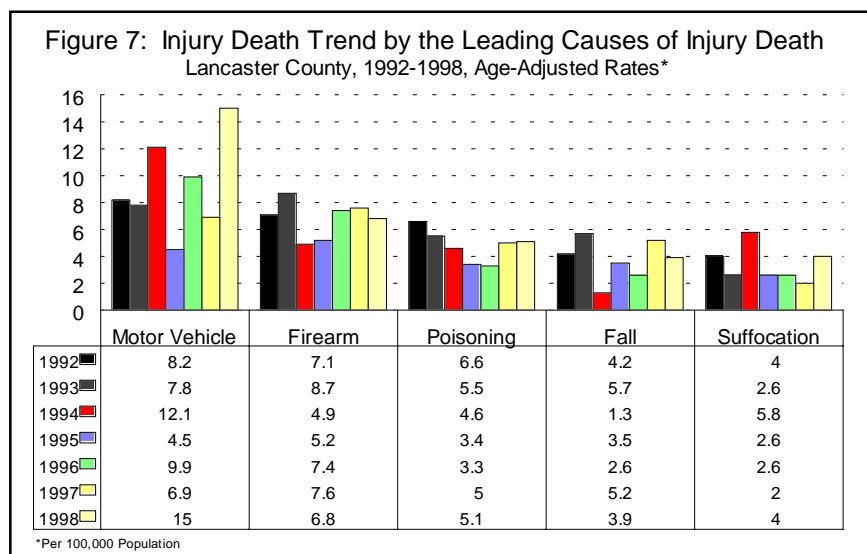
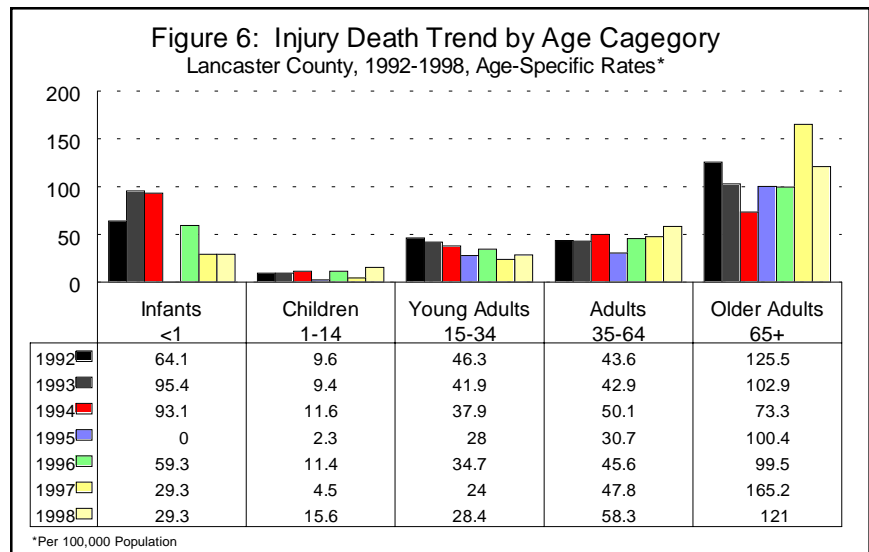
Death Trend by Age

The age specific rates were the highest among the older population (65 years and above) followed by infants less than 1 year. Children less than one year old and young adults between 15 and 34 years old experienced overall decline in death rates (Figure 6). Older adults (65 and above) and children in the 1-14 age group showed inconsistent trends while adults between 35 and 64 years old demonstrated an overall increase in death rates.

The year 1995 was remarkable, when death rates were at an all time low. In 1995, no deaths were reported among infants less than 1 year old, whereas only one death occurred among 1-14 year olds. The death rates for adults 65 and older jumped to 165.2/10⁵ in 1997 from 99.5/10⁵ in 1996 (a 66 percent increase!).

Death Trend by Cause

Figure 7 shows the trends of five leading causes of injury deaths in Lancaster County between 1992 and 1999. These causes were motor vehicle traffic or MVT, firearm, poisoning, fall and suffocation. The fluctuations in rates were so great that no particular trend can be identified for any of these causes. The MVT and firearms were the two leading causes of injury deaths during the time of record.



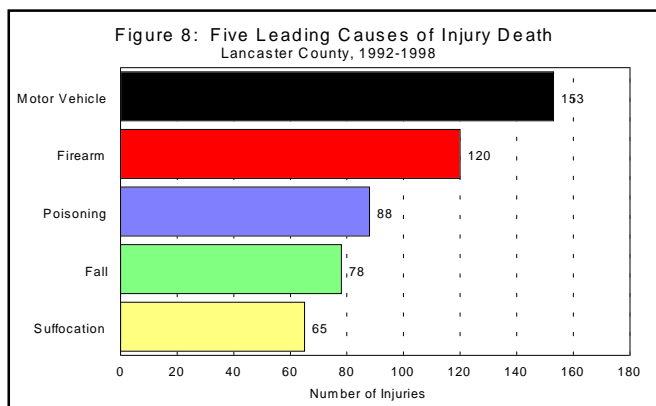
Injury Death

A comparison of injury death rate is shown in Table A. The Lancaster County rate was lower than that of the U.S. and Nebraska.

Causes for Injury Deaths

Under this section, an overview of causes of all injury deaths are given first, and then a description of mechanisms of deaths by intent follows. In addition, mechanisms and intents are also examined with reference to age and gender.

Table 2 and Figure 8 present mechanisms by which injury deaths occurred in Lancaster County between 1992 and 1998. Motor Vehicle Traffic, with 153 deaths, was the leading mechanism of injury deaths followed by firearm (n=120), poisoning (n=88), fall (n=78), suffocation (n=65), and adverse effects of medical care (n=38).

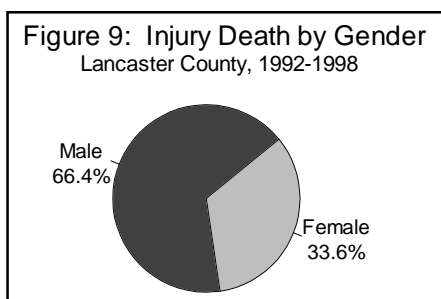


Injury Death and Age

Table 3 shows the numbers and proportions of deaths among different age-groups. More than 50 percent of all injury related deaths occurred among the 15-44 age group. The highest number of injury deaths, however, were observed among the 35-44 year olds followed by the 25-34 year olds.

Injury Death and Gender

Men were two times (66.4%) more likely than women (33.6%) to die due to fatal injuries in Lancaster County between 1992 and 1999 (Figure 9).



**Table A: Injury Death
Rate-1992-1998**

	Crude Rate
United States	55.87
Nebraska	52.68
Lancaster County	41.56

*Rate per 100,000 population.

**Table 2: Frequency, Proportion and
Rate of Injury Death by Cause
Lancaster County, 1992-1998**

Cause	Frequency	Proportion	Crude Rate*
Motor Vehicle, Traffic	153	23.0%	9.6
Firearm	120	18.1%	7.5
Poisoning	88	13.3%	5.5
Fall	78	11.7%	4.9
Suffocation	65	9.8%	4.1
AE Medical Care	17	2.6%	1.1
Fire/Burn	15	2.3%	0.9
Transport, Other	14	2.1%	0.9
Cut/Pierce	11	1.7%	0.7
Machinery	8	1.2%	0.5
Struck by, Against	8	1.2%	0.5
Legal Intervention	7	1.1%	0.4
Drowning	6	0.9%	0.4
Natural/Environmental	5	0.8%	0.3
Pedestrian, Other	4	0.6%	0.3
Pedal Cyclist, Other	1	0.2%	0.1
AE Drugs	1	0.2%	0.1
Other*	63	9.5%	4.0
Total	664	100.0	41.7

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

*Rate per 100,000 Population

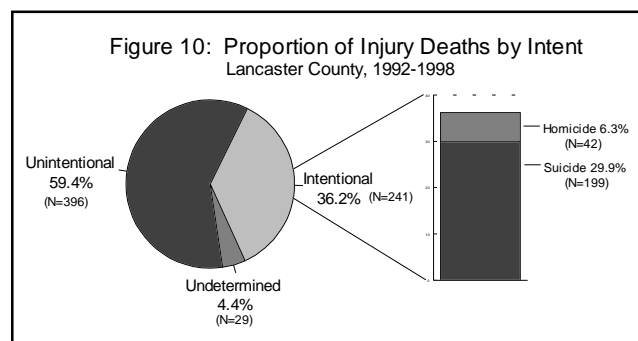
**Table 3: Frequency, Proportion, and
Rate of Injury Death by Age
Lancaster County, 1992-1998**

Age	Frequency	Age-Specific Rate*
<1	12	52.1%
1-4	9	9.9%
5-9	7	6.2%
10-14	12	12.0%
15-19	38	30.0%
20-24	43	24.1%
25-34	121	41.4%
35-44	131	53.6%
45-54	61	43.3%
55-64	36	31.2%
65-74	47	49.6%
75-84	76	132.6%
85+	73	336.5%
Total	666	41.7%

*Per 100,000 Population

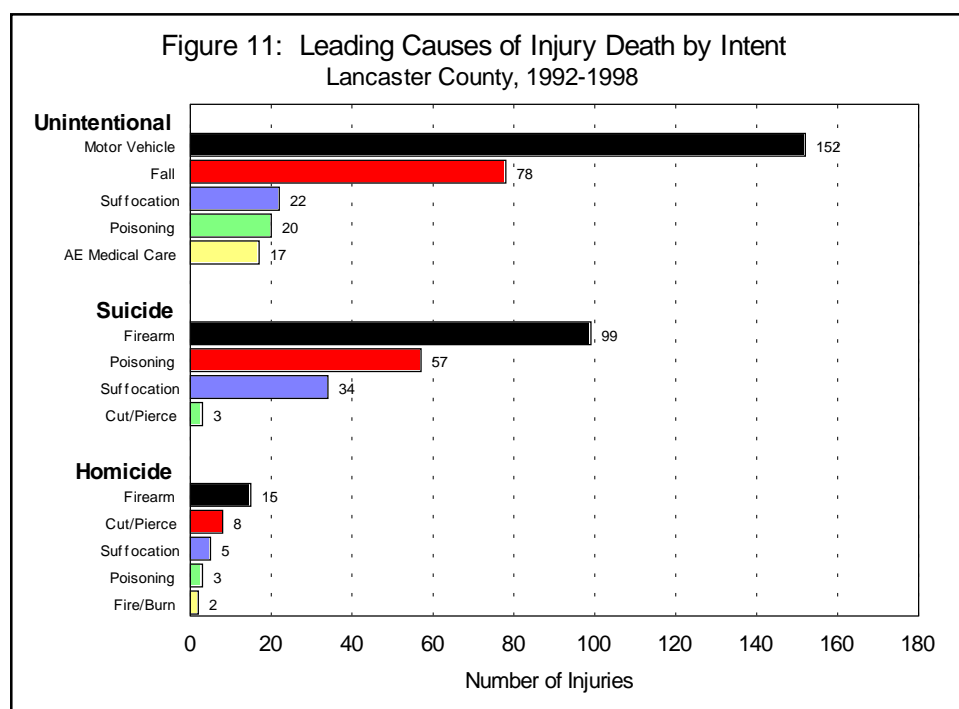
Intent of Injury Death

As described earlier, injuries are classified as intentional or unintentional. Intentional injuries are further categorized as homicides or suicides. The majority of injury related deaths in Lancaster County were due to unintentional injuries that represented approximately 60 percent of all injury mortality (Figure 10). Most intentional deaths fall under suicide. Suicides constituted approximately 30 percent of all injury deaths compared with 6 percent due to homicide. In other words, for every homicide there were nine unintentional deaths, whereas for every suicide there were two unintentional deaths in Lancaster County between 1992 and 1998. Undetermined injuries contributed to 4.4 percent of all injury deaths.



Intent of Injury Death and Cause

Figure 11 shows the leading causes of death associated with intent. MVT (n=152) was the leading cause of unintentional death followed by fall (n=78) and suffocation (n=22). On the other hand, firearms (n=99) were the leading cause of suicide followed by poisoning (n=57) and suffocation (n=34). Firearms were also the leading cause of death for homicide (n=15). Cut/pierce (n=8) was the second leading cause of death under this category followed by suffocation (n=5). Interestingly, suffocation was the third leading cause of death in all three categories (unintentional, suicide, and homicide).



Intent of Injury Deaths and Age

Table 4 reveals intent of injury death and by the age of the deceased. Except for the 25-34 age group, unintentional injuries were the number one killer among all age categories. Suicide was the leading cause of injury death in 25-34 age group. Suicide was the second leading intent of death among the 20-24 and the 35-84 age groups. There were 22 deaths where the intent was not determined.

**Table 4: Intent of Injury Death by Age
Lancaster County, 1992-1998 Age-Specific Rates***

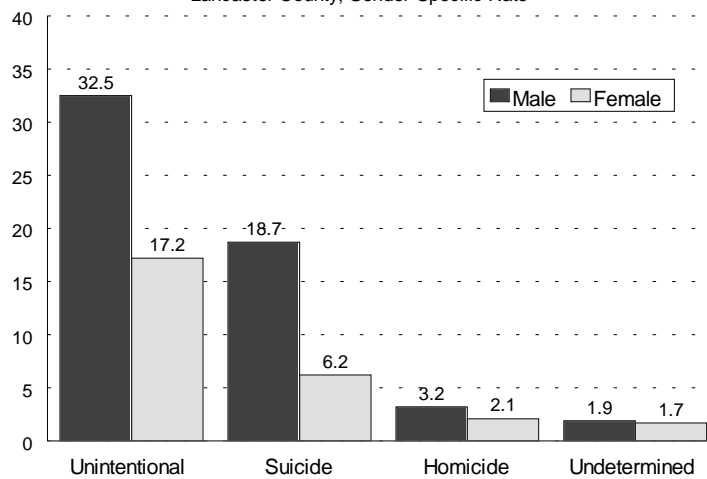
Rank	Age (In Years)												
	Under 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
1	Unintent. Injuries 34.8 (8)**	Unintent. Injuries 7.7 (7)	Unintent. Injuries 4.4 (5)	Unintent. Injuries 8.0 (8)	Unintent. Injuries 22.1 (28)	Unintent. Injuries 10.1 (18)	Suicide 18.5 (54)	Unintent. Injuries 25.4 (62)	Unintent. Injuries 22.0 (31)	Unintent. Injuries 14.7 (17)	Unintent. Injuries 36.9 (35)	Unintent. Injuries 108.2 (62)	Unintent. Injuries 313.4 (68)
2	Homicide 13.0 (3)	Homicide 2.2 (2)	Homicide 1.8 (2)	Undetermn. Injuries 2.0 (2)	Homicide 3.9 (5)	Suicide 9.0 (16)	Unintent. Injuries 16.1 (47)	Suicide 23.3 (57)	Suicide 18.4 (26)	Suicide 12.1 (14)	Suicide 10.5 (10)	Suicide 24.4 (14)	Undetermn. Injuries 13.8 (3)
3	Undetermn. Injuries 4.3 (1)	Suicide 0.0 (0)	Suicide 0.0 (0)	Homicide 1.0 (1)	Suicide 3.9 (5)	Homicide 3.4 (6)	Homicide 4.1 (12)	Undetermn. Injuries 3.7 (9)	Homicide 2.8 (4)	Homicide 2.6 (3)	Homicide 1.1 (1)	Homicide 0.0 (0)	Suicide 9.2 (2)
4	Suicide 0.0 (0)	Undetermn. Injuries 0.0 (0)	Undetermn. Injuries 0.0 (0)	Suicide 1.0 (1)	Undetermn. Injuries 0.0 (0)	Undetermn. Injuries 1.7 (3)	Undetermn. Injuries 2.7 (8)	Homicide 1.2 (3)	Undetermn. Injuries 0.0 (0)	Undetermn. Injuries 1.7 (2)	Undetermn. Injuries 1.1 (1)	Undetermn. Injuries 0.0 (0)	Homicide 0.0 (0)

*Age-Specific Rate Per 100,000 Population **Rate (Number of Deaths)

Intent of Injury Death and Gender

Figure 12 depicts the gender differences associated with the intent of injury deaths. Men were three times more likely to die due to suicide and two times as likely to die due to unintentional injuries than were women. The homicide rate for men was $3.2/10^5$ compared with $2.1/10^5$ for women. More women (n=14) in Lancaster County died due to undetermined injuries than men (n=8) (Table 6).

**Figure 12: Injury Death by Gender and Intent
Lancaster County, Gender-Specific Rate***



*Per 100,000 Population

Table 5 illustrates the intent of injury deaths among men and women according to age. Unintentional injuries were the leading cause of death among most age categories in both men and women. However, suicide was the leading cause of death in men 20-34 years old. Suicide was also the leading cause of injury death among women 25-54 years old. Suicide was the second leading cause of death among males 15-19 years and 35 years and above, compared to 20-24, 55-64, and 75-84 age groups among women. Homicide was the second leading cause of death for male children less than 5 years old, and female children less than 1 year old.

Suicide rates were the highest (50.2/10⁵) among older men between 75 and 84 years followed by 35-44 (31/10⁵) and 25-34 (26.3/10⁵) age-groups. On the other hand, women in 25-54 age group were more likely to commit suicide than other age categories (in other age groups, such as 15-19 and 20-24, the rates were substantially lower or insignificant).

Table 5: Intent of Injury Death by Gender by Age
Lancaster County, 1992-1998 Gender and Age Specific Rates*

Gender	Rank	Age (In Years)													Total
		Under 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
Male	1	Unintent. Injuries 36 (4)**	Unintent. Injuries 12.9 (6)	Unintent. Injuries 7 (4)	Unintent. Injuries 13.6 (7)	Unintent. Injuries 28.9 (18)	Suicide 16.6 (15)	Suicide 26.3 (39)	Unintent. Injuries 35.9 (44)	Unintent. Injuries 36 (25)	Unintent. Injuries 21.6 (12)	Unintent. Injuries 60.3 (25)	Unintent. Injuries 195.7 (39)	Unintent. Injuries 340.7 (18)	254 (32.5)
	2	Homicide 18 (2)	Homicide 4.39(2)	--	Undetermn Injuries 3.9 (2)	Suicide 6.4 (4)	Unintent. Injuries 15.5 (14)	Unintent. Injuries 25.6 (38)	Suicide 31 (38)	Suicide 25.9 (18)	Suicide 19.8 (11)	Suicide 24.1 (10)	Suicide 50.2 (10)	Suicide 37.9 (2)	18.9 (148)
	3	--	--	--	Suicide 1.9 (1)	Homicide 4.8 (3)	Homicide 5.5 (5)	Homicide 4 (6)	Undetermn Injuries 3.3 (4)	Homicide 4.3 (3)	Homicide 1.8 (1)	Undetermn Injuries 2.4 (1)	--	--	3.2 (25)
	4	--	--	--	Homicide 1.9 (1)	--	Undetermn Injuries 3.3 (3)	Undetermn Injuries 2.7 (4)	Homicide 1.6 (2)	--	Undetermn Injuries 1.8 (1)	--	Undetermn Injuries --	--	1.9 (15)
Female	1	Unintent. Injuries 38.1 (4)	Unintent. Injuries 2.2 (1)	Homicide 3.5 (2)	Unintent. Injuries 2 (1)	Unintent. Injuries 15.4 (10)	Unintent. Injuries 4.5 (4)	Suicide 10.3 (15)	Suicide 15.5 (19)	Suicide 11.1 (8)	Unintent. Injuries 8.3 (5)	Unintent. Injuries 18.6 (10)	Unintent. Injuries 60.9 (23)	Unintent. Injuries 301.7 (50)	17.2 (142)
	2	Homicide 9.5 (1)	--	Unintent. Injuries 1.8 (1)	--	Homicide 3.1 (2)	Suicide 1.1 (1)	Unintent. Injuries 6.2 (9)	Unintent. Injuries 14.7 (18)	Unintent. Injuries 8.3 (6)	Suicide 5 (3)	Homicide 1.9 (1)	Suicide 10.6 (4)	Undetermn Injuries 18.1 (3)	6.2 (51)
	3	Undetermn Injuries 9.5 (1)	--	--	--	Suicide 1.5 (1)	Homicide 1.1 (1)	Homicide 4.1 (6)	Undetermn Injuries 4.1 (5)	Homicide 1.4 (1)	Homicide 3.3 (2)	--	--	--	2.1 (17)
	4	--	--	--	--	--	--	Undetermn Injuries 2.8 (4)	Homicide 0.8 (1)	--	Undetermn Injuries 1.7 (1)	--	--	--	1.7 (14)

*Age-Specific Rate Per 100,000 Population **Rate per 100,000 Population (Number of Deaths)

Unintentional Injury Death

Lancaster County's unintentional injury death rate is also significantly lower than those of the U.S and the state of Nebraska.

	Crude Rate
United States	34.21
Nebraska	36.27
Lancaster County	24.8

*Rate per 100,000 Population

Unintentional Injury Deaths and Cause

Table 6 shows the causes of unintentional injury deaths. A total of 396 people died due to unintentional injuries between 1992-98. Motor Vehicle Traffic or MVT injuries (n=152) were the leading cause of unintentional injury deaths in Lancaster County. Falls with 78 cases were the second leading cause of unintentional deaths followed by suffocation (n=22) and poisoning (n=20). Although firearms were the second leading cause of death when injury intents were combined (Table 2), they contributed only 0.5 percent (ranked 13th) of injury deaths under unintentional category.

Table 6: Frequency and Proportion of Unintentional Injury Death by Cause Lancaster County, 1992-1998

Cause	Frequency	Proportion	Rate*
Motor Vehicle, Traffic	152	38.4%	95.1
Fall	78	19.7%	48.8
Suffocation	22	5.6%	13.7
Poisoning	20	5.1%	12.5
AE Medical Care	17	4.3%	10.6
Transport, Other	14	3.5%	8.7
Fire/Burn	12	3.0%	7.5
Machinery	8	2.0%	5.0
Struck by, Against	7	1.8%	4.3
Drowning	5	1.3%	3.1
Natural/Environmental	5	1.3%	3.1
Pedestrian, Other	4	1.0%	2.5
Firearm	2	0.5%	1.2
Pedal Cyclist, Other	1	0.3%	0.6
Pedal Cyclist, Other	1	0.3%	0.6
AE Drugs	1	0.3%	0.6
Other*	47	11.9%	29.4
Total	396	100.0%	247.9

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

*Rate per 100,000 Population.

Table 7: Five Leading Causes of Unintentional Injury Deaths by Age, Sex, and Age-Specific Rate* Lancaster County 1992-1998

Sex	Age-Group Rank	Under 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
Female	1	Fall 19.3(2)	Falls 19.0(8)	Struck by/Against 8.4(5)	Cut/Pierce 8.5(5)	MVT 15.3(10)	MVT 4.5(4)	MVT 4.8(7)	MVT 5.7(7)	AE Medical Care 6.9(5)	AE Drugs 13.2(8)	AE Drugs 22.2(12)	Falls 63.6(24)	Falls 277.59(46)	Falls 13.9(113)
	2	Natural and Environmental 9.5(1)	Overexertion 7.1(3)	Fall 5.0(3)	Struck by/Against 6.8(4)	Overexertion 6.1(4)	Falls 3.4(3)	Overexertion 4.1(6)	Cut/Pierce 2.4(3)	AE Drugs 6.9(5)	Falls 9.9(6)	Falls 22.2(12)	AE Drugs 58.3(22)	AE Drugs 132.7(22)	AE Drugs 8.6(70)
	3	Overexertion 9.5(1)	Fire/Burn 4.8(2)	MVT 1.7(1)	Fall 3.4(2)	Poisoning 3.0(2)	Fire/Burn 2.24(2)	Unspecified 2.0(3)	Falls 1.6(2)	Falls 2.8(2)	AE Medical Care 8.26(5)	AE Medical Care 14.8(8)	AE Medical Care 39.7(15)	AE Medical Care 90.5(15)	AE Medical Care 5.5(45)
	4	...	Poisoning 2.3(1)	Cut/Pierce 1.7(1)	Poisoning 3.4(2)	Other 3.0(2)	Overexertion 1.1(1)	Struck by/Against 2.0(3)	Firearm 1.6(2)	Overexertion 2.8(2)	Other 3.3(2)	Cut/Pierce 1.63(3)	Cut/Pierce 10.6(4)	Cut/Pierce 24.1(4)	MVT 4.9(40)
	5	...	Struck by/Against 2.3(1)	Fire/Burn 1.7(1)	AE Medical Care 1.7(1)	Suffocation 1.5(1)	Struck by/Against 1.1(1)	Poisoning 2.0(3)	Poisoning 1.6(2)	Unspecified 2.8(2)	MVT 1.7(1)	Struck by/Against 1.1(2)	Suffocation 7.9(3)	MVT 18.0(3)	Cut/Pierce 2.8(23)
Male	1	Falls 9.0(1)	Falls 18.6(8)	Struck by/Against 11.2(6)	Struck by/Against 21.9(12)	Falls 14.4(9)	Cut/Pierce 9.1(7)	Cut/Pierce 4.7(7)	MVT 5.7(7)	Falls 7.2(5)	AE Medical Care 19.8(11)	AE Drugs 41.1(17)	Falls 150.5(30)	Falls 90.5(15)	Falls 12.4(101)
	2	Natural/Environmental 9.0(1)	Fire/Burn 11.6(5)	Falls 11.2(6)	Falls 5.5(5)	MVT 14.4(9)	MVT 7.1(5)	Overexertion 4.0(6)	Struck by/Against 4.1(5)	Overexertion 7.2(5)	Falls 10.8(6)	AE Medical Care 33.8(14)	AE Drugs 50.7(21)	AE Drugs 36.2(6)	AE Drugs 6.9(56)
	3	Struck by/Against 9.0(1)	MVT 4.6(2)	Poisoning 3.7(2)	Pedal Cyclist 3.3(3)	Cut/Pierce 9.6(6)	Overexertion 5.7(4)	MVT 3.4(5)	Cut/Pierce 4.1(5)	AE Drugs 5.7(4)	AE Drugs 9.00(5)	Falls 16.9(7)	AE Medical Care 24.1(10)	AE Medical Care 18.1(3)	AE Medical Care 6.0(49)
	4	AE Medical Care 9.0(1)	Other 4.6(2)	Other 3.7(2)	Overexertion 3.3(3)	Overexertion 8.0(5)	Falls 4.2(3)	Falls 2.7(4)	AE Drugs 3.2(4)	Struck by/Against 2.8(20)	Cut/Pierce 5.4(3)	MVT 12.1(5)	Unspecified 7.2(3)	Other 12.1(2)	MVT 5.3(43)
	5	...	Poisoning 2.3(1)	AE Medical Care 1.8(1)	Cut/Pierce 3.3(3)	Struck by/Against 4.8(3)	Struck by/Against 4.2(3)	Firearm 1.34(20)	Other 3.2(4)	Unspecified 2.8(2)	MVT 3.6(2)	Cut/Pierce 9.64(4)	MVT 7.2(3)	Suffocation 6.0(1)	Cut/Pierce 4.9(40)

*Rate Injuries per 100,000 population in respective age-group

** Rate (number of injuries)

Figure 13 shows the leading mechanisms by which unintentional injuries were caused in Lancaster County.

Unintentional Injury Death and Age

Motor vehicle crashes were the leading cause of death among Lancaster County residents who were between 5 and 74 years of age (Table 8). Motor vehicle traffic injuries also accounted for 72 percent of all injury deaths among people between 15 and 54 years. The highest age-specific death rate associated with MVT was recorded among the 15-19 year age group ($17.4/10^5$) followed by 35-44 year, 45-54 year and 25-34 year age-groups. Overall falls were the second leading cause of unintentional injury death; however they were the leading cause of death among adults 75 years and older.

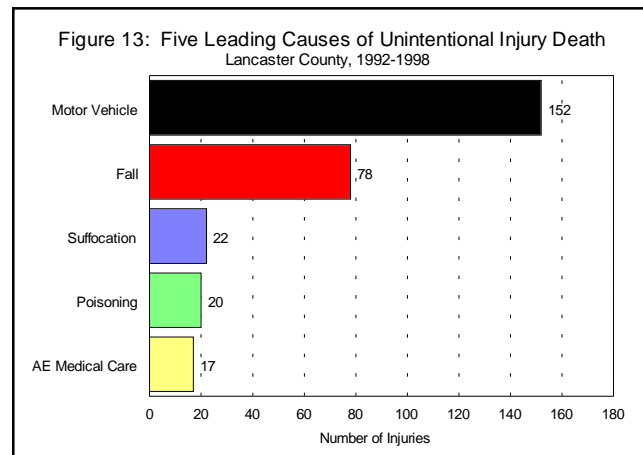


Table 8: Five Leading Causes* of Unintentional Injury Death by Age
Lancaster County, 1992-1998 Age-Specific Rates**

Rank	Age (In Years)												
	Under 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
1	Suffocation 17.4 (4)***	Fire/Burn 2.2 (2)	Motor Vehicle 3.5 (4)	Motor Vehicle 5.0 (5)	Motor Vehicle 17.4 (22)	Motor Vehicle 7.3 (13)	Motor Vehicle 9.2 (27)	Motor Vehicle 12.3 (30)	Motor Vehicle 12.1 (17)	Motor Vehicle 7.8 (9)	Motor Vehicle 12.7 (12)	Fall 40.1 (23)	Fall 152.1 (33)
2	Fall 4.3 (1)	Motor Vehicle 2.2 (2)	Suffocation 0.9 (1)	Fall 1.0 (1)	Fire/Burn 1.6 (2)	Drowning 0.6 (1)	Poisoning 1.7 (5)	Transport, Other 2.9 (7)	Poisoning 2.8 (4)	Fall 2.6 (3)	Fall 5.3 (5)	Motor Vehicle 15.7 (9)	Suffocation 27.7 (6)
3	Fire/Burn 4.3 (1)	Struck By or Against 2.2 (2)	...	Pedestrian 1.0 (1)	...	Fall 0.6 (1)	Fall 1.0 (3)	Poisoning 2.5 (6)	Fall 2.8 (4)	...	AE Medical Care 5.3 (5)	Suffocation 12.2 (7)	AE Medical Care 23.0 (5)
4	Natural/Environmental 4.3 (1)	Transport Other 1.1 (1)	...	Struck By or Against 1.0 (1)	...	Machinery 0.6 (1)	...	Fall 1.6 (4)	AE Medical Care 1.4 (2)	...	Pedestrian, Other 2.1 (2)	AE Medical Care 5.2 (3)	Motor Vehicle 9.2 (2)
5	...	...	...	...	...	Transport, Other 0.6 (1)	...	Suffocation 1.2 (3)	...	...	Poisoning 2.1 (2)	...	Natural/Environmental 9.2 (2)

*Excludes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

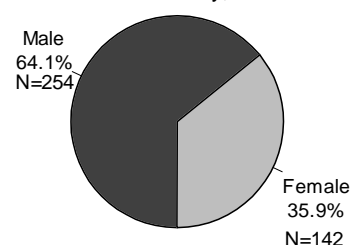
**Age-Specific Rate Per 100,000 Population

***Rate (Number of Deaths)

Unintentional Injury Death, Gender and Age

Figure 14 shows unintentional injury deaths according to gender. In general, males ($n=254$) were substantially at a higher risk of dying due to unintentional injuries than were females ($n=142$). Table 9 reveals that the MVT related injuries were number one killer of both sexes. However, males ($n=107$) were almost 2.5 times more likely than females ($n=45$) to die due to MVT related injuries. Firearms were the second leading cause of death for men, whereas falls were the second leading cause of death for women. Poisoning and suffocation were the third and fourth leading cause of death, respectively, for both sexes.

Figure 14: Unintentional Injury Death
by Gender
Lancaster County, 1992-1998



Interestingly, women did not suffer unintentional injury death due to struck by/against, whereas approximately three percent of injury deaths in men were due to unintentional struck by/against (Table 9).

When examining leading causes of unintentional deaths according to gender, MVT was the number one killer of 5-74 years old men, and 10-54 years old women (Table 10). Because the number of deaths for some of the leading causes is so low a meaningful conclusion cannot be drawn. For example, with just one death, we cannot say that falls were the second leading cause of death among men 10-14 years old.

**Table 9: Frequency and Proportion of Unintentional Injury Death by Gender by Cause
Lancaster County, 1992-1998**

Male				Female			
Cause	Frequency	Proportion	Gender Specific Rate*	Cause	Frequency	Proportion	Gender Specific Rate*
Motor Vehicle, Traffic	107	42.1%	13.6	Motor Vehicle, Traffic	45	31.7%	5.5
Fall	35	13.8%	4.4	Fall	43	30.3%	5.3
Poisoning	14	5.5%	1.7	Suffocation	10	7.0%	1.2
AE Medical Care	12	4.7%	1.5	Poisoning	6	4.2%	0.7
Suffocation	12	4.7%	1.5	AE Medical Care	5	3.5%	0.6
Transport, Other	11	4.3%	1.4	Fire/Burn	4	2.8%	0.5
Fire/Burn	8	3.1%	1.0	Transport, Other	3	2.1%	0.4
Machinery	7	2.8%	0.9	Natural/Environmental	2	1.4%	0.2
Struck by, Against	7	2.8%	0.9	AE Drugs	1	0.7%	0.1
Drowning	5	2.0%	0.6	Machinery	1	0.7%	0.1
Pedestrian, Other	4	1.6%	0.5	Other*	22	15.5%	2.7
Natural/Environmental	3	1.2%	0.4	Total	142	100.0%	17.5
Firearm	2	0.8%	0.2				
Pedal Cyclist, Other	1	0.4%	0.1				
Other*	26	10.2%	3.3				
Total	254	100.0%	32.3				

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths
*Rate per 100,000 Population

**Table 10: Five Leading Causes* of Unintentional Injury Death by Gender by Age
Lancaster County, 1992-1998 Gender and Age Specific Rates****

		Age (In Years)												
Gender	Rank	Under 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Male	1	Suffocation 27.0(3)***	Fire/Burn 4.3 (2)	Motor Vehicle 7.0 (4)	Motor Vehicle 7.8 (4)	Motor Vehicle 22.5 (14)	Motor Vehicle 11.1 (10)	Motor Vehicle 13.5 (20)	Motor Vehicle 16.3 (20)	Motor Vehicle 17.3 (12)	Motor Vehicle 12.6 (7)	Motor Vehicle 19.3 (8)	Fall 75.3 (15)	Fall 151.4 (8)
	2	Fire/Burn 9.0 (1)	Motor Vehicle 4.3 (2)	--	Fall 1.9 (1)	Drowning 1.6 (1)	Drowning 1.1 (1)	Fall 2.0 (3)	Transport, Other 4.9 (6)	Poisoning 5.8 (4)	Fall 1.8 (1)	AE Medical Care 9.6 (4)	Motor Vehicle 25.1 (5)	--
	3	--	Struck By or Against 4.3 (2)	--	Pedestrian, Other 1.9 (1)	Fire/Burn 1.6 (1)	Fall 1.1 (1)	Poisoning 2.0 (3)	Poisoning 3.3 (4)	Fall 4.3 (3)	Machinery 1.8 (1)	Pedestrian, Other 4.8 (2)	Suffocation 20.1 (4)	--
	4	--	--	--	Struck By or Against 1.9 (1)	Firearm 1.6 (1)	Machinery 1.1 (1)	--	Suffocation 2.4 (3)	AE Medical Care 2.9 (2)	Suffocation 1.8 (1)	Poisoning 4.8 (2)	AE Medical Care 15.1 (3)	--
	5	--	--	--	--	Pedestrian, Other 1.6 (1)	--	--	--	--	Transport, Other 1.8 (1)	--	Struck by, Against 10.0 (2)	--
Female	1	Fall 9.5 (1)	Transport Other 2.2 (1)	Suffocation 1.8 (1)	Motor Vehicle 2.0 (1)	Motor Vehicle 12.3 (8)	Motor Vehicle 3.4 (3)	Motor Vehicle 4.8 (7)	Motor Vehicle 8.1 (10)	Motor Vehicle 6.9 (5)	Fall 3.3 (2)	Fall 3.3(2)	Fall 21.2 (8)	Fall 150.8 (25)
	2	Natural/Environmental 9.5 (1)	--	--	--	Fire/Burn 1.5 (1)	Transport, Other 1.1 (1)	Poisoning 1.4 (2)	Fall 1.6 (2)	Fall 1.4 (1)	Motor Vehicle 3.3 (2)	Motor Vehicle 3.3 (4)	Motor Vehicle 10.6 (4)	Suffocation 30.2 (5)
	3	Suffocation 9.5 (1)	--	--	--	AEDrugs 1.5 (1)	--	--	Fire/Burn 1.6 (2)	--	Fire/Burn 1.7 (1)	AE Medical Care 1.9 (1)	Suffocation 7.9 (3)	AE Medical Care 24.1 (4)
	4	--	--	--	--	--	--	--	Poisoning 1.6 (2)	--	--	--	Machinery 2.6 (1)	--
	5	--	--	--	--	--	--	--	--	--	--	--	Poisoning 2.6 (1)	--

*Excludes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

**Age-Specific Rate Per 100,000 Population

***Rate per 100,000 Population (Number of Deaths)

Intentional Injury Deaths

Although there was no significant difference in suicide rates among Lancaster County, State of Nebraska and the U.S., the rate of Lancaster County was slightly lower than that of the State and the Nation (Table C).

	Rate
United States	11.75
Nebraska	12.45
Lancaster County	11.39

*Rate per 100000 Population.

Intentional injury deaths are comprised of two types of injuries resulting in death: 1) self-inflicted (suicide), and 2) assault (homicide). A total of 199 deaths were caused by self-inflicted injuries compared with 42 deaths due to assault.(see Figure 10)

Suicide

Suicide and Cause

Figure 15 shows the mechanisms by which suicides were committed in Lancaster County. Unlike unintentional deaths which were caused by more than 17 mechanisms, suicides were committed by using only four methods: 1) firearm, 2) poisoning, 3) suffocation, and 4) cut/pierce. As expected firearms were the lead cause of suicide (n=99). In committing suicide, firearms were used in more than 50 percent of the cases followed by poisoning (29%) and suffocation (17%). Cut/pierce accounted for less than two percent of self-inflicted deaths.

Suicide and Age

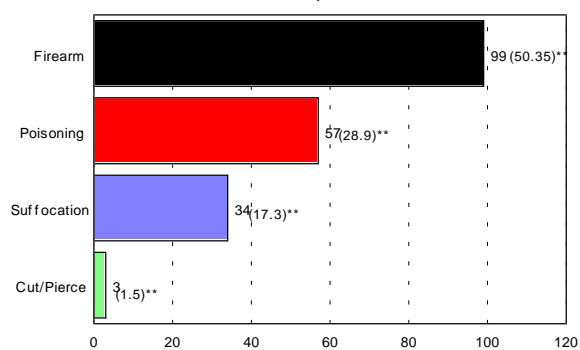
As seen in Table 12, there were no suicides reported from among the 0-9 age group, and only one among the 10-14 age-group in seven years. More than 55 percent of all suicides were committed by people in the 25-44 age group. Suicide numbers were also high among 45-54 and 20-24 age groups. However, age-specific suicide rates were the highest among the 75-84 age group with a rate of 23.3/10⁵. The 35-44 age group was close second followed by the 25-34 age group.

Table 11: Frequency and Proportion of Suicide by Cause
Lancaster County, 1992-1998

Cause	Frequency	Proportion
Firearm	99	50.3%
Poisoning	57	28.9%
Suffocation	34	17.3%
Cut/Pierce	3	1.5%
Other *	4	2.0%
Total	197	100.0%

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

Figure 15: Four Leading Causes of Suicide*
Lancaster County, 1992-1998



*Due to small "N" values, only four leading causes are identifiable
**Percent of Suicide

Table 12: Frequency, Proportion, and Rate of Suicide by Age
Lancaster County, 1992-1998

Age	Frequency	Proportion
<1	0	0.0%
1-4	0	0.0%
5-9	0	0.0%
10-14	1	0.5%
15-19	5	2.5%
20-24	16	8.0%
25-34	54	27.1%
35-44	57	28.6%
45-54	26	13.1%
55-64	14	7.0%
65-74	10	5.0%
75-84	14	7.0%
85+	2	1.0%
Total	199	100.0%

*Per 100,000 Population

Suicide and Gender

Gender difference is dramatic when it comes to suicide. Men were three times more likely to commit suicide than were women (Figure 16). The preferred mechanism to commit suicide was also very different between sexes. Firearms were the leading means of committing suicide for men (n=85), whereas poisoning was the preferred means for women to commit suicide. (n=27) (Table 14).

Table 13: Leading Causes* of Suicide Death by Age
Lancaster County, 1992-1998, Age-Specific Rates**

Age (In Years)										
Rank	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
1	Firearm 1.0 (1)***	Firearm 2.4 (3)	Firearm 7.3 (13)	Firearm 5.8 (17)	Firearm 9.8 (24)	Firearm 8.5 (12)	Firearm 6.9 (8)	Firearm 10.5 (10)	Firearm 17.4 (10)	Firearm 4.6 (1)
2	...	Suffocation 0.8 (1)	Poisoning 1.1 (2)	Poisoning 5.8 (17)	Poisoning 8.2 (20)	Poisoning 7.1 (10)	Poisoning 4.3 (5)	...	Poisoning 3.5 (2)	Poisoning 4.6 (1)
3	...	...	Suffocation 0.6 (1)	Suffocation 5.8 (17)	Suffocation 4.1 (10)	Suffocation 1.4 (2)	Suffocation 0.9 (1)	...	Suffocation 3.5 (2)	...
4	...	...	...	...	Cut/Pierce 0.4 (1)	Cut/Pierce 1.4 (2)	...	...	...	...

*Excludes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

**Age-Specific Rate Per 100,000 Population

***Rate per 100,000 Population (Number of Deaths)

Table 14: Frequency and Proportion of Suicide
by Gender by Cause
Lancaster County, 1992-1998

Male			Female		
Cause	Frequency	Proportion	Cause	Frequency	Proportion
Firearm	85	58.2%	Poisoning	27	52.9%
Poisoning	30	20.5%	Firearm	14	27.5%
Suffocation	27	18.5%	Suffocation	7	13.7%
Cut/Pierce	2	1.4%	Cut/Pierce	1	2.0%
Other*	2	1.4%	Other*	2	3.9%
Total	146	100.0%	Total	51	100.0%

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

Figure 16: Suicide by Gender
Lancaster County, 1992-1998

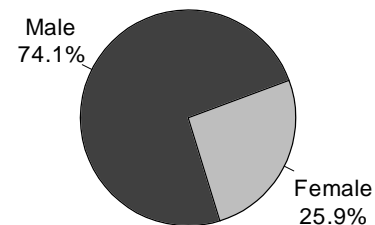


Table 15: Leading Causes* of Suicide Death by Gender by Age
Lancaster County, 1992-1998 Gender and Age Specific Rates**

Gender	Rank	Age (In Years)									
		10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Male	1	Firearm 1.9 (1)***	Firearm 3.2 (2)	Firearm 14.4 (13)	Firearm 10.8 (16)	Firearm 13.9 (17)	Firearm 13.0 (9)	Firearm 14.4 (8)	Firearm 24.1 (10)	Firearm 40.1 (8)	Firearm 18.9 (1)
	2	...	Suffocation 1.6 (1)	Poisoning 1.1 (1)	Suffocation 9.4 (14)	Poisoning 9.0 (11)	Poisoning 8.6 (6)	Poisoning 5.4 (3)	...	Poisoning 5.0 (1)	Poisoning 18.9 (1)
	3	...	...	Suffocation 1.1 (1)	Poisoning 4.7 (7)	Suffocation 6.5 (8)	Suffocation 2.9 (2)	...	...	Suffocation 5.0 (1)	...
	4	...	...	...	...	Cut/Pierce 0.8 (1)	Cut/Pierce 1.4 (1)	...	...	...	...
Female	1	...	Firearm 1.5 (1)	Poisoning 1.1 (1)	Poisoning 6.9 (10)	Poisoning 7.3 (9)	Poisoning 5.5 (4)	Poisoning 3.3 (2)	...	Firearm 5.3 (2)	...
	2	...	...	...	Suffocation 2.1 (3)	Firearm 5.7 (7)	Firearm 4.2 (3)	Suffocation 1.7 (1)	...	Poisoning 2.6 (1)	...
	3	...	...	...	Firearm 0.7 (1)	Suffocation 1.6 (2)	Cut/Pierce 1.4 (1)	...	...	Suffocation 2.6 (1)	...

*Excludes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

**Age-Specific Rate Per 100,000 Population

***Rate per 100,000 Population (Number of Deaths)

Homicide

Homicide rate in Lancaster County was more than three times lower than that of the Nation and 1.3 times lower than that of the State.

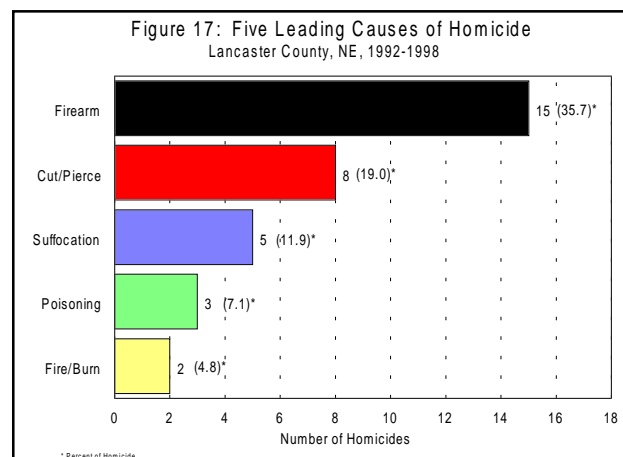
Homicide and Cause

The number of assault-related deaths (n=42) was nine times lower than unintentional deaths and 4.7 times lower than suicide. Homicide, like suicide, was carried out by fewer

Table C: Suicide Rates
1992-1998

	Rate
United States	11.75
Nebraska	12.45
Lancaster County	11.39

*Rate per 100,000 Population.



means than unintentional deaths (Table 16). The preferred means used in homicide were 1) firearms (n=15), 2) cut/pierce (n=8), and 3) suffocation (n=5). Firearms, which were used in more than 35 percent of cases, were the preferred means to carryout homicide in Lancaster County. Cut/pierce was used in 19 percent of cases followed by unspecified (16.7%), suffocation (11.9%), and poisoning (7.1%). Figure 17 gives some of the leading means of homicide.

Homicide and Age

As expected, age-specific homicide numbers were highest among the 25-34 age group (n=12), followed by 20-24 age group (n=6). However, the age-specific rates were highest among <1 year olds (rates were more than three times higher among less than 1 year age group than they were among 25-34 age group). Young adults between 15 and 19 years of age suffered five fatalities (see Table 17).

**Table 16: Frequency and Proportion of Homicide by Cause
Lancaster County, 1992-1998**

Cause	Frequency	Proportion
Firearm	15	35.7%
Cut/Pierce	8	19.0%
Suffocation	5	11.9%
Poisoning	3	7.1%
Fire/Burn	2	4.8%
Struck by, Against	1	2.4%
Other*	8	19.0%
Total	42	100.0%

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

**Table 17: Frequency, Proportion, and Rate of Homicide by Age
Lancaster County, 1992-1998**

Age	Frequency	Proportion	Age Specific Rate
<1	3	7.1%	13.9
1-4	2	4.8%	2.4
5-9	2	4.8%	1.8
10-14	1	2.4%	0.9
15-19	5	11.9%	3.9
20-24	6	14.3%	3.6
25-34	12	28.6%	4.1
35-44	3	7.1%	1.2
45-54	4	9.5%	2.8
55-64	3	7.1%	2.6
65-74	1	2.4%	1.0
75-84	0	0.0%	0.0
85+	0	0.0%	0.0
Total	42	100.0%	2.6

*Per 100,000 Population

**Table 18: Five Leading Causes* of Homicide by Age
Lancaster County, 1992-1998 Rate** and Number of Deaths**

Rank	Age (In Years)											
	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
1	Firearm 1.1 (1)***	Poisoning 1.8 (2)	Firearm 1.0 (1)	Firearm 2.4 (3)	Firearm 1.7 (3)	Firearm 1.4 (4)	Cut/Pierce 0.4 (1)	Cut/Pierce 1.4 (2)	Firearm 1.7 (2)	...	...	...
2	Cut/Pierce 0.8 (1)	Cut/Pierce 0.6 (1)	Cut/Pierce 1.0 (3)	Firearm 0.4 (1)	...	Suffocation 0.9 (1)	...	...	...
3	Suffocation 0.8 (1)	Fire/Burn 0.6 (1)	Suffocation 0.7 (2)	Suffocation 0.4 (1)	...	...	...	...	...
4
5

*Excludes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

**Age-Specific Rate Per 100,000 Population

***Rate per 100,000 Population (Number of Deaths)

Homicide and Gender

Approximately, sixty percent of all homicides occurred among Lancaster County men. Firearms were the preferred means to kill men, whereas firearms and suffocation were equally the preferred means to kill women. (Table 19). Although poisoning and struck by/against were two of the causes to kill women, they were not used to kill men in Lancaster County.

Table 19: Frequency and Proportion of Homicide by Gender by Cause
Lancaster County, 1992-1998

Male			Female		
Cause	Frequency	Proportion	Cause	Frequency	Proportion
Firearm	11	44.0%	Firearm	4	23.5%
Cut/Pierce	5	20.0%	Suffocation	4	23.5%
Fire/Burn	2	8.0%	Cut/Pierce	3	17.6%
Suffocation	1	4.0%	Poisoning	3	17.6%
Other*	6	24.0%	Struck by, Against	1	5.9%
Total	25	100.0%	Other*	2	11.8%
			Total	17	100.0%

*Includes Other Specified and Classifiable, Other Specified Not EC, and Unspecified Deaths

Figure 18: Homicide by Gender
Lancaster County, 1992-1998

